IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Cancelled)

2. (Currently Amended) The ~~vector~~ method of claim 18 [[1]], wherein the gene targeting construct further comprises a first site-specific recombination sequence for a recombinase and a second site-specific recombination sequence for the recombinase, wherein the first and second site-specific recombination sequences flank the DNA encoding the positive selection marker.

3. (Currently Amended) The ~~vector~~ method of claim 2, wherein the recombinase is Cre recombinase.

4. (Currently Amended) The ~~vector~~ method of claim 2, wherein the first and second site-specific recombination sequences are loxP sequences.

Claim 5 (Cancelled)

6. (Currently Amended) The ~~vector~~ method of claim 18 [[1]], wherein the positive selection marker is neomycin phosphotransferase.

7. (Currently Amended) The ~~vector~~ method of claim 18 [[1]], wherein the first polyadenylation sequence comprises a SV40 polyadenylation sequence.

Claims 8-10 (Cancelled)

11. (Currently Amended) The ~~vector~~ method of claim 18 [[1]], wherein the second polyadenylation sequence ~~expression cassette~~ comprises a BGH polyadenylation sequence.

12. (Currently Amended) The ~~vector~~ method of claim 18 [[1]], wherein the negative selection marker is HSV thymidine kinase or diphtheria toxin (DT-A).

Claim 13 (Cancelled)

14. (Currently Amended) The method of claim 18 [[13]], wherein the vector recombines with the gene *via* homologous recombination.

15. (Currently Amended) The method of claim 18 [[13]], further comprising identifying the genetically altered cell, wherein the cell's genome comprises the construct and the positive selection marker is expressed.

16. (Currently Amended) The method of claim 18 [[13]], wherein the somatic cell is a mammalian cell.

17. (Original) The method of claim 16, wherein the mammalian cell is a human cell.

18. (Currently Amended) ~~The method of claim 13~~ A method for disrupting a gene of interest in a somatic cell *in vitro*, which method comprises introducing a targeting vector comprising a gene targeting construct comprising a first cloning site operably linked to a DNA encoding a positive selection marker, a second cloning site and a first polyadenylation sequence, wherein the construct is promoterless; and an expression cassette comprising a promoter operably linked to DNA encoding a negative selection marker and a second polyadenylation sequence, wherein the first cloning site comprises a first DNA segment that is homologous to a first genomic target sequence and the second cloning site comprises a second DNA segment that is homologous to a second genomic target sequence, into a somatic cell such that the first genomic target sequence and the second genomic target sequence recombine with the gene to yield a genetically altered cell, further comprising introducing a double-stranded oligonucleotide into the somatic cell.

19. (Original) The method of claim 18, wherein the double-stranded oligonucleotide is 62 bp.

20. (Currently Amended) The method of claim 18, further comprising ~~A method for disrupting a gene of interest in a somatic cell *in vitro*, which method comprises:~~

~~introducing a targeting vector comprising a gene targeting construct comprising a first cloning site operably linked to a DNA encoding a positive selection marker, a second cloning site and a first polyadenylation sequence, wherein the construct is promoterless; and an expression cassette comprising a promoter operably linked to DNA encoding a negative selection marker and a second polyadenylation sequence, wherein the first cloning site comprises a first DNA segment that is homologous to a first genomic target sequence and the second cloning site comprises a second DNA segment that is homologous to a second genomic target sequence, into the somatic cell such that the first genomic target sequence and the second genomic target sequence recombine with the gene to yield a first genetically altered cell; and~~

introducing a recombinase to the first genetically altered cell, such that the positive selection marker is removed from the construct to yield a second genetically altered cell.

Claim 21 (Cancelled)

22. (Original) The method of claim 20, further comprising identifying the first genetically altered cell, wherein the cell's genome comprises the construct and the positive selection marker is expressed.

23. (Original) The method of claim 22, further comprising identifying the second genetically altered cell.

24. (Original) The method of claim 20, wherein the somatic cell is a mammalian cell.

25. (Original) The method of claim 24, wherein the mammalian cell is a human cell.

Claims 26-27 (Cancelled)

28. (Currently Amended) An isolated cell prepared by the method of claim 18 [[13]].

Claims 29-30 (Cancelled)

31. (Currently Amended) The method of claim 18 ~~isolated somatic cell of claim 30~~, wherein the somatic cell is a B cell or a fibroblast cell.

32. (Currently Amended) A somatic cell gene targeting ~~vector~~ transfection mixture comprising:

a gene targeting construct comprising a first cloning site operably linked to a DNA encoding a positive selection marker, a second cloning site and a first polyadenylation sequence, wherein the construct is promoterless, wherein the first cloning site comprises a first DNA segment that is homologous to a first genomic target sequence and the second cloning site comprises a second DNA segment that is homologous to a second genomic target sequence; and an expression cassette comprising a promoter operably linked to DNA encoding a negative selection marker and a second polyadenylation sequence,

and a double-stranded oligonucleotide ~~wherein the promoter is a weak promoter, a phosphoglycerate kinase (PGK) promoter or a modified Rous sarcoma virus (RSV) promoter~~.

33. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the gene targeting construct further comprises a first site-specific recombination sequence for a recombinase and a second site-specific recombination sequence for the recombinase, wherein the first and second site-specific recombination sequences flank the DNA encoding the positive selection marker.

34. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the recombinase is Cre recombinase.

35. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the first and second site-specific recombination sequences are loxP sequences.

36. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the positive selection marker is neomycin phosphotransferase.

37. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the first polyadenylation sequence comprises a SV40 polyadenylation sequence.

38. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the expression cassette comprises a BGH polyadenylation sequence.

39. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the negative selection marker is HSV thymidine kinase or diphtheria toxin (DT-A).

40. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the double-stranded oligonucleotide is at least 100 bp

41. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the double-stranded oligonucleotide is at least 75 bp.

42. (New) The somatic cell gene targeting transfection mixture of claim 32, wherein the double-stranded oligonucleotide is 62 bp.

43. (New) A somatic cell gene targeting vector comprising:

a targeting vector comprising a gene targeting construct comprising a first cloning site operably linked to a DNA encoding a positive selection marker, a second cloning site and a first polyadenylation sequence, wherein the construct is promoterless, wherein the

first cloning site comprises a first DNA segment that is homologous to a first genomic target sequence and the second cloning site comprises a second DNA segment that is homologous to a second genomic target sequence; and wherein the targeting vector comprises an expression cassette comprising a promoter operably linked to DNA encoding a negative selection marker and a second polyadenylation sequence, wherein the promoter is a weak promoter, or a phosphoglycerate kinase (PGK) promoter.

44. (New) The somatic cell gene targeting vector of claim 43, wherein the gene targeting construct further comprises a first site-specific recombination sequence for a recombinase and a second site-specific recombination sequence for the recombinase, wherein the first and second site-specific recombination sequences flank the DNA encoding the positive selection marker.

45. (New) The somatic cell gene targeting vector of claim 43, wherein the recombinase is Cre recombinase.

46. (New) The somatic cell gene targeting vector of claim 43, wherein the first and second site-specific recombination sequences are loxP sequences.

47. (New) The somatic cell gene targeting vector of claim 43, wherein the positive selection marker is neomycin phosphotransferase.

48. (New) The somatic cell gene targeting vector of claim 43, wherein the first polyadenylation sequence comprises a SV40 polyadenylation sequence.

49. (New) The somatic cell gene targeting vector of claim 43, wherein the expression cassette comprises a BGH polyadenylation sequence.

50. (New) The somatic cell gene targeting vector of claim 43, wherein the negative selection marker is HSV thymidine kinase or diphtheria toxin (DT-A).

51. (New) The method of claim 18, wherein the double-stranded oligonucleotide is at least 100 bp.

52. (New) The method of claim 18, wherein the double-stranded oligonucleotide is at least 75 bp.